EXHIBIT D

1 2 3 4 5 6 7 8 9 10 11 12	Kaspar J. Stoffelmayr (pro hac vice) kaspar.stoffelmayr@bartlitbeck.com Katherine M. Swift (pro hac vice) katherine.swift@bartlitbeck.com Sten A. Jernudd sten.jernudd@bartlitbeck.com BARTLIT BECK LLP 54 West Hubbard Street Chicago, IL 60654 Telephone: 312. 494.4400 Facsimile: 312.494.4440 Alex J. Harris (pro hac vice) alex.harris@bartlitbeck.com BARTLIT BECK LLP 1801 Wewatta Street, Suite 1200 Denver, CO 80202 Telephone: 303.592.3100 Facsimile: 303.592.3140 Attorneys for Defendant WALGREEN CO.	
13	,,,,,,	
14	UNITED STATES DISTRICT COURT	
15	FOR THE NORTHERN DISTRICT OF CALIFORNIA	
16	SAN FRANCISCO DIVISION	
17	CITY AND COUNTY OF SAN FRANCISCO, et al.,	Civil Case No.: 3:18-CV-07591-CRB
18	Plaintiffs,	DECLARATION OF KYLE WETZOLD IN
19	V.	SUPPORT OF WALGREENS' RESPONSIVE STATEMENT TO PLAINTIFF'S DISPUTE
20 21	PURDUE PHARMA L.P., et al.,	LETTER RE: WALGREENS' DUE DILIGENCE NOTES
22		
23	Defendants.	
24		
25		
26		
27		
28		
-	I	

- 1. I am a Senior Director at FTI Consulting, Inc. ("FTI"), 227 West Monroe Street, Chicago, IL 60606. I have nearly eight years of experience working with complex datasets and transactional databases in bankruptcies, complex litigation, financial and accounting investigations, government and regulatory investigations, product development and management, and strategic engagements. I have significant experience in the areas of advanced analytics, big data, complex data modeling and analysis, database management, and technology strategy. I have a B.A. in Economics from the University of Chicago, and an M.B.A., Dean's Honors with Distinction, from Columbia Business School. I make this declaration based on my work as a consultant on behalf of Walgreens and could and would competently testify to the matters below if called to do so.
- 2. In the course of my work for Walgreens, I have worked closely with Walgreens IT staff to collect a variety of data, including Walgreens dispensing data for 205 stores in nine Bay Area counties. I have had dozens of discussions with Walgreens IT staff regarding data collection issues, including discussions with IT staff responsible for Walgreens' dispensing systems, and relating to the collection of pharmacist notes from hard copy prescriptions.
- 3. In this case, Walgreens produced records from its San Francisco stores for 2,929,829 prescriptions, for 579,606 distinct patients, dating back to 2006. Of those prescriptions, at least 1,978,759 were presented in hard copy.
- 4. In this case, Walgreens' counsel asked me to help Walgreens' IT staff collect and prepare the electronic notes fields in Walgreens' dispensing data for production.
- 5. My team and I identified six tables of data to collect that may contain notes fields: patient_history, prescription_consult_adhoc, prescriber_location, prescription_consult_activity, prescription, and prescription_dur_interaction. The six tables being collected contain over 34 billion records.
- 6. I have worked with Walgreens IT staff to determine the most efficient approach to pulling this data, the results of scoping and testing, and the best method of exportation. There was a small delay over the last week to fix export issues related to delimiters that complicated our ability to

26

27

28

load, process, and analyze the data. These files were corrected and re-sent once the delimiter issue had been corrected.

- 7. As of Tuesday, June 1st, my team at FTI has received from Walgreens exports of two tables, tl Prescription consult adhoc and prescriber location (122,065,272 records) across three files. Previously, my team collected the patient history table across 60 files, containing more than 2.74B total records. We still have yet to receive 32 billion records (32,050,524,255) across our three largest tables.
- 8. We have also been working to find ways to expedite the process and pull data as quickly as we can. To ensure we were pulling the data in a way that was both as efficient as possible and limited disruption to Walgreens' Information Technology teams, we explored several approaches to pulling data from the tables referenced above with Walgreens' technical staff. We tested the runtime of sample data exports (e.g., how long it would take to query and export data) and tested whether it was possible to export multiple files in parallel without significantly slowing down processing time. To the best of my understanding, it appears that Walgreens may be able to export multiple files simultaneously without degrading performance, which should speed up the querying and export process.
- 9. In addition, to speed the process, we are pulling the files nationwide, instead of drafting more complex queries to collect notes associated with just San Francisco or California prescriptions. We found that pulling California-specific export files taxed computing power in order to execute the more complex queries that isolated California-specific stores.
- 10. Even though we have structured the querying and export process to maximize efficiency, given (1) the amount of data we must pull and export; (2) the size of the tables collected; (3) the fact that the data is stored at Walgreens on a legacy database leveraged every day by a number of Walgreens teams; and (4) resource constraints with respect to both people and processing power, we anticipate that the remaining files will take at least three weeks to pull and export, even with the Walgreens team and my team working as quickly as possible.
- 11. This estimate does not take into account the time needed to process, load, and quality control the data, or the time necessary to apply auto-redaction algorithms to said prescriptions, and to

confirm that auto-redactions are correct. While some of these processes will occur in parallel with data collection as files are loaded, reviewed, and redacted on a rolling bases, review will likely extend at least two weeks beyond the end of collection.

- 12. I understand that Jonathan Jaffe, Plaintiff's technology consultant, submitted a declaration in this case, and I have read Mr. Jaffe's declaration. Mr. Jaffe made a number of suggestions about how Walgreens can automatically redact protected health information ("PHI") in these notes fields. Specifically, Mr. Jaffe made a number of recommendations related to "regular expressions" and "pattern matching," two data techniques that could be used to automatically find and replace PHI.
- 13. In general, we agree with the approach outline by Mr. Jaffe, and already have many of the techniques he suggested in place to identify suggested redactions. But the application of "regular expressions" and "pattern matching" is not an exact science and, to protect sensitive patient health information, my team at FTI has not collected all relevant patient data that would facilitate exact matching. While it is true that "regular expressions" and "pattern matching" can identify a majority of the text requiring redaction, some percentage of redactions may be missed or inappropriately redacted, which necessitates a two-pronged approach combining automation and manual review.
- 14. In addition, Mr. Jaffee suggests the use of descriptions in the redactions, like "AUTO REDACTED PHI: PATIENT NAME." Our code uses only the word "[redacted]" and does not specify what "type" of redaction it is. This is due to the fact that there can be overlap between redactions (e.g., a seven-digit Rx vs. seven-digit phone number, or "Kyle Wetzold" appearing as a name and part of an email address), and the logic required to create the redaction descriptor would be quite complicated (and take more time) to develop.
- 15. Mr. Jaffe also suggested a number of specific auto-redactions, including "Patient Name," "Date of Birth," "Social Security Number," "Address," "Phone Number," "Email," and "Medical Record Identifier." I address each of them in turn below:
 - Patient Name We have collected data related to patient names. Currently, we are implementing auto-redactions for text exactly matching the last name on record.

- Due to complexities related to first name variations (e.g., Thomas vs. Tom vs. Tommy vs. T.), we are not currently using auto-redactions for first names.
- Date of Birth We have collected data related to patient birth dates. We are implementing auto-redactions for several permutations of text containing the exact date on record related to a given patient note, using the following date formats:
 - o YYYY[non-alphanumeric]MM[non-alphanumeric]DD
 - o MM[non-alphanumeric]DD[non-alphanumeric]YYYY
 - o YY[non-alphanumeric]MM[non-alphanumeric]DD
 - o MM[non-alphanumeric]DD[non-alphanumeric]YY
 - o DD[non-alphanumeric]MM[non-alphanumeric]YY
 - o DD[non-alphanumeric]MM[non-alphanumeric]YYYY
- Social Security Number We have not collected data related to patient SSNs.
 Currently, we are implementing auto-redactions for text containing nine (9) digits with the following parameters:
 - It could be divided into three parts by hyphen (-), blank space (), or nothing (all numbers consecutive).
 - The first part should have three digits and should not be 000, 666, or between 900 and 999.
 - o The second parts should have two digits and it should be from 01 to 99.
 - o The third part should have four digits and it should be from 0001 to 9999.
- Address We have collected data related to patient addresses. We are currently not implementing auto-redactions to addresses due to the complexities with how they could appear in notes. While we could attempt to identify and auto-redact exact patient address matches, it is unlikely that a patient address appearing in a note would appear in the full standard form created by a concatenation of the relevant and available address fields(e.g., 1234 Main Street, Apt 10, San Francisco, CA 94016).

- Phone number We have not collected data related to patient phone numbers. We are currently implementing auto-redactions for:
 - Text containing ten (10) digits—with or without punctuation after the third and sixth digit.
 - Text containing seven (7) digits—with or without punctuation after the third digit.
- Email We have not collected data related to patient email addresses. We are currently implementing auto-redactions for text containing an "@" symbol and a period after it. The auto redactions only include text preceding the "@" symbol. (e.g., [redacted]@aol.com).
- Medical Record Identifier We have collected data related to prescription
 numbers. We are currently implementing auto-redactions for text containing any
 number six to seven digits in length. Seven digits is the maximum length of
 prescription numbers in our dispensing data.

Dated: June 3, 2021 Respectfully submitted,

By: /s/ Kyle Wetzold

Kyle Wetzold